

## ABSTRACT

This invention relates to radiation curable compositions comprising an alkenyl ether functional polyisobutylene, a cationic photoinitiator, and a miscible reactive diluent selected from specified organic vinyl ether compounds, epoxy functional compounds, or 5 compounds having the formula  $R^8X_b$ , wherein  $R^8$  is a non-silicon containing organic group, X is an organic group containing at-least one acrylate functional group, and b has a value of 1-3. The radiation curable compositions exhibit a low cure energy, have a high moisture vapor barrier, high damping characteristics, and a high refractive index, and provide a barrier to corrosive vapors and have maintained or enhanced modulus, tensile 10 strength, and toughness.

U.S. GOVERNMENT USE